

- Scientific monthly. New York. v. 23. October, 1926.*
Dexter, Edwin G. The influence of the weather on human conduct. p. 322-330.
Sociedad astronómica de España y América. Revista. Barcelona. Año 16. Julio-agosto, 1926.
Mendirichaga, M. Hernández. Las lluvias y el arbolado. p. 85-87.
Società meteorologica italiana. Bollettino bimensuale. Torino. v. 45. 1926.
Gamba, Pericle. Il "tifigramma" di Sir Napier Shaw. p. 25-28. (Aprile-giugno.)
Raja, Maria. La pioggia caduta a Napoli dal 1865 al 1909. p. 28-34. (Aprile-giugno.)
La riunione della "Commissione internazionale per lo studio dell'alta atmosfera" a Londra nell'Aprile 1925 ed il "tifigramma" di Sir Napier Shaw. p. 21-25. (Aprile-giugno.)
Crestani, Giuseppe. Vortici aerei (trombe e milinelli). p. 48-54. (Luglio-settembre.)
Pacini, D. Radiazione penetrante. p. 45-47. (Luglio-settembre.)
Technique aéronautique. Paris. 17^e année. 1926.
Wehrli, Ph. Influence des conditions météorologiques sur la mesure de l'altitude d'un avion. p. 226-232. (15 août.) p. 282-287. (15 septembre.)
Terrestrial magnetism & atmospheric electricity. Baltimore. v. 31. 1926.
Gockel, A. Ueber die Ursache der Schwankungen des Luftelektrischen Potentialgefalles. p. 81-87. (June.)
Peters, W. J., & Ennis, C. C. The 27-day recurrency in earth currents. p. 57-70. (June.)
Thomson, Andrew. Preliminary comparison of atmospheric-electric potential at sea with that under closely similar insular conditions at Apia, western Samoa. p. 113-120. (September.)
Tycos-Rochester. Rochester, N. Y. v. 16. October, 1926.
Hallenbeck, Cleve. Sensible temperatures. p. 148-151; 152.
Historic dark days. p. 153-154.
Lloyd, J. R. The great storm of March 11-14, 1888. p. 133-135.
Tycos-Rochester. Rochester, N. Y. v. 16. October, 1926—Con.
Strange, H. G. L. The barometer and thermometer as a means of increasing profits in farming. p. 127.
Talman, Charles Fitzhugh. Goosey, goosey, gander. Concerning certain foolish ways of foretelling the weather. p. 128-131; 132.
Way, E. E. The Tycos museum. p. 155-156. [Describes a collection of thermometers.]
Winters, S. R. Unusual use for weather records. p. 139; 142-146.
U. S. Hydrographic office. Pilot chart of the Central American waters. Washington, D. C. September, 1926.
Some uses of weather maps for ships at sea.
Washington academy of sciences. Journal. Baltimore, Md. v. 16. August 19, 1926.
Austin, L. W. Long-distance radio receiving measurements and atmospheric disturbances at the Bureau of Standards in 1925. p. 398-408.
Wetter. Berlin. 43. Jahrgang. 1926.
Voigts, Heinrich. Untersuchungen zur Klimakunde Lübecks. p. 180-185. (August.)
Zistler, P. Übertragung von Wetterkarten im Funkbild. p. 188-191. (August.)
Hofmann, O. Die täglichen Regenmengen im April, Mai, und September, 1925, im Sauerlande. Eine Studie zur Untersuchung des orographischen Einflusses auf die Niederschläge. p. 169-178. (August); p. 193-202. (September.)
Diesner, P. Monate mit wesentlich gleichartiger Witterung im grössten Teile Europas. p. 212-214. (September.)
Gilcher. Zweckmässige Organisation eines Wirtschafts-Wetterdienstes. p. 214-216. (September.)
Peppler, W. Langjährige Mittelwerte der Temperatur der Luft und des Wassers am Bodensee in den frühen Morgenstunden. p. 205-207. (September.)
Zeitschrift für Instrumentenkunde. Berlin. 46. Jahrgang. August 1926.
Holborn, L., & Otto, J. Über die Alterung von Thermometergläsern. p. 415-424.
Schmidt, Wilhelm. Ein neues Verfahren zur Messung der Bodentemperatur. p. 431-433.

SOLAR OBSERVATIONS

SOLAR AND SKY RADIATION MEASUREMENTS DURING OCTOBER, 1926

By HERBERT H. KIMBALL, Solar Radiation Investigations

For a description of instruments and exposures and an account of the method of obtaining and reducing the measurements, the reader is referred to the REVIEW for January, 1924, 52:42, January, 1925, 53:29, and July, 1925, 53:318.

From Table 1 it is seen that solar radiation intensities averaged close to the October normal at Lincoln, Nebr., above the normal at Madison, Wis., and at Washington, D. C., below normal in the morning and above in the afternoon. City smoke is no doubt at least partly responsible for the decrease of solar radiation intensities at Washington during the morning hours.

Table 2 shows a deficiency in the amount of radiation received on a horizontal surface from the sun and sky at all three stations for which normals have been determined.

At Washington skylight polarization measurements made on three days give a mean of 57 per cent, with a maximum of 60 per cent on the 9th. At Madison, measurements obtained on four days give a mean of 67 per cent, with a maximum of 70 per cent on the 26th. The Washington values are below the corresponding averages for October. Those for Madison are close to October averages for that station.

TABLE 1.—Solar radiation intensities during October, 1926

[Gram-calories per minute per square centimeter of normal surface]

Washington, D. C.												
Sun's zenith distance												
		8 p.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon
Date	75th mer. time	Air mass										Local mean solar time
		A. M.					P. M.					
		e.	5.0	4.0	3.0	2.0	1.0	2.0	3.0	4.0	5.0	
Oct. 3	mm.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	mm.	
4	15.65				0.70	0.85	1.23	0.95	0.76		15.65	
5	17.37				0.80	1.03					18.59	
7	17.37				0.82	0.98	1.17				16.79	
8	5.79		0.82	0.98	1.17						5.56	
9	6.02	0.64	0.74	0.93	1.10						5.79	
14	7.57	0.82	0.92	1.06	1.25	1.54	1.27	1.08	0.88	0.79	4.75	
15	10.59	0.69	0.81	0.94							9.14	
19	9.14		0.53	0.67							7.29	
21	7.29				1.26	1.49	1.26	1.06	0.89	0.81	6.02	
22	5.79				1.05						5.16	
26	5.79		0.71	0.84	1.05	1.34	1.03				5.56	
27	2.74				1.22						3.15	
28	4.57	0.51	0.67	0.80	1.02						3.15	
	4.95	0.60	0.73	0.88	1.07	1.42	1.15	0.92	0.78	0.64	4.75	
Means		0.65	0.74	0.86	1.10	1.40	1.13	0.96	0.85	0.75		
Departures		-0.12	-0.10	-0.08	-0.01	-0.05	+0.02	+0.03	+0.05	+0.05		

1 Extrapolated.

TABLE 1.—Solar radiation intensities during October, 1926—Con.
Madison, Wis.

Date	Sun's zenith distance											Local mean solar time
	8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon	
	75th mer. time	Air mass										
		A. M.					P. M.					
		e.	5.0	4.0	3.0	2.0	1.0	2.0	3.0	4.0	5.0	
Oct. 7	mm.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.	mm.	
13	4.57			0.95	1.21	1.45	1.27	1.10			4.95	
26	4.95		0.90	1.01	1.25		1.45	1.33			5.36	
28	2.74			1.19	1.32						2.87	
29	4.75			1.00	1.15						4.37	
Means			(0.90)	1.04	1.23	(1.45)	(1.30)	(1.10)				
Departures			-0.03	-0.02	+0.04	+0.07	+0.11	+0.08				

Lincoln, Nebr.

Oct. 1	6.50	0.83	0.95	1.08	1.24	1.42		1.02	0.84	0.68	5.16
4	5.79				1.26	1.42					7.87
6	6.02	0.67	0.88	1.14	1.29	1.46					6.50
7	7.04				1.21	1.43	1.14		0.91	0.79	9.83
8	9.14	0.82	0.92	1.05	1.21	1.39					11.38
13	5.36					1.44	1.25	1.09	0.95	0.83	6.27
14	6.02	0.91	1.00	1.14	1.36						5.36
20	4.37		1.09	1.22	1.36	1.53	1.39	1.20	1.04	0.95	4.57
26	4.57	1.09	1.15	1.24	1.39	1.55					4.37
Means		0.86	1.00	1.14	1.29	1.46	1.26	1.10	0.94	0.81	
Departures		-0.03	+0.03	+0.02	±0.00	-0.04	±0.00	+0.01	-0.02	-0.04	

TABLE 2.—Solar and sky radiation received on a horizontal surface
[Gram-calories per square centimeter of horizontal surface]

Week beginning—	Average daily radiation					Average daily departure from normal		
	Wash- ington	Madi- son	Lincoln	Chi- cago	New York	Wash- ington	Madi- son	Lincoln
1926	cal.	cal.	cal.	cal.	cal.	cal.	cal.	cal.
Oct. 1	312	208	328	144	223	-16	-76	-24
8	274	246	246	163	213	-33	-10	-78
15	224	140	309	126	157	-63	-89	+15
22	239	216	266	134	151	-25	+10	+2
Deficiency since first of year on Oct. 28						-4,858	-1,302	-2,492

551.506 (261.1) WEATHER OF NORTH AMERICA AND ADJACENT OCEANS
NORTH ATLANTIC OCEAN

By F. A. YOUNG

October was an exceptionally stormy month and the number of days with gales was considerably above the normal over the greater part of the ocean. Several tropical disturbances occurred during the month, three of which were of slight intensity, but the storm that created such havoc in Cuba on the 20th was one of the most severe on record. In addition to the notes herein regarding these disturbances other particulars appear elsewhere in the REVIEW.

The number of days with fog was apparently below the normal over the entire ocean. As usual, the greatest amount occurred over the Grand Banks, where it was reported on 8 days; it occurred on from 3 to 7 days over the middle section of the steamer lanes, from 3 to 4 days off the American coast, and from 1 to 5 off the coast of northern Europe.

TABLE 1.—Averages, departures, and extremes of atmospheric pressures at sea level, 8 a. m. (75th meridian), North Atlantic Ocean, October, 1926

Stations	Average pressure	Departure ¹	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Julianeabaab, Greenland	29.76	(?)	30.16	16th.	29.10	1st.
St. Johns, Newfoundland	29.86	-0.06	30.14	25th.	29.02	19th.
Nantucket	29.95	-0.07	30.40	1st.	29.36	25th.
Hatteras	30.02	-0.01	30.30	2d.	29.58	25th.
Key West	29.94	-0.04	30.12	28th.	29.70	20th.
New Orleans	30.01	0.00	30.20	27th.	29.74	24th.
Swan Island	29.78	-0.13	29.93	29th.	29.56	19th.
Turks Island	29.96	+0.01	30.06	29th.	29.80	15th.
Bermuda	30.06	+0.04	30.30	31st.	29.54	22d.
Horta, Azores	30.07	-0.05	30.34	8th.	29.60	20th.
Lerwick, Shetland Islands	29.79	0.00	30.52	4th.	28.83	9th.
Valencia, Ireland	29.93	+0.02	30.55	4th.	29.47	22d.
London	29.91	0.00	30.55	4th.	29.31	29th.

¹ From normals shown on H. O. Pilot Chart, based on observations at mean noon, or 7 a. m., 75th meridian.

² Mean of 24 observations; seven days missing.

³ No normal established.

⁴ And on other dates.

On the 1st and 2d high pressure prevailed generally along the American coast, and from the 1st until the 5th over the British Isles. On the 2d a low, central near 44° N., 39° W., was accompanied by moderate northerly gales in the westerly quadrants.

On the 3d an area of low pressure covered Newfoundland, and vessels between St. Johns and the 40th parallel reported moderate southwesterly gales.

On the 3d and 4th the cable steamer *Henry Holmes* encountered winds of gale force in the vicinity of St. Lucia, as shown in table.

On the 4th the Newfoundland Low of the 3d was central near 50° N., 40° W., and stormy weather still prevailed over a limited area between the 40th and 50th parallels and 40th and 55th meridians.

On the 5th and 6th comparatively high pressure and moderate winds were the rule over the ocean, except that on the latter date Belle Isle was near the center of a depression that remained in that vicinity until the 13th, although it was surrounded for the most part by moderate winds.

On the 8th a low was central near 57° N., 12° W., that afterwards developed into a very severe disturbance, as it moved eastward. On the 9th the storm area extended from the 45th to 60th parallels, and from the 5th meridian, east, to the 20th, west, and the land stations on the British Isles reported winds of force 6 to 9, with barometric readings as low as 28.82 inches. This disturbance moved rapidly eastward and on the 10th was in the vicinity of the North Sea, where strong northwesterly gales prevailed throughout the 12th.

On the 12th a well-developed low was central near 55° N., 32° W., with strong westerly gales in the southerly quadrants. On the same day there was also a secondary low of comparatively slight intensity off the west coast of Ireland. By the 13th these two lows had evidently combined and were now over the North Sea. On the 13th